



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

Frank O'Bannon  
Governor

Lori F. Kaplan  
Commissioner

July 23, 2003

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Indianapolis, Indiana 46206-6015  
(317) 232-8603  
(800) 451-6027  
[www.IN.gov/idem](http://www.IN.gov/idem)

TO: Interested Parties / Applicant

RE:Dexter Axle Company 169-17244-00044  
Office of Air Quality

## Notice of Decision - Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures

FNPERAM.wpd 8/21/02

July 23, 2003

Mr. Mark Weaver  
Dexter Axle Company  
P. O. Box 250  
Elkhart, Indiana 46515

Dear Mr. Weaver:

Re: Exempt Construction and Operation Status,  
169-17244-00044

The application from Dexter Axle Company, received on May 7, 2003, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following emission units, to be located at 11870 N 650 E, North Manchester, Indiana, are classified as exempt from air pollution permit requirements:

1. Four (4) welding stations, identified as TFW-01, using MIG stainless steel welding wire, with maximum welding wire consumption rate of 3 pounds per hour for each station and exhausting to stack TRW-01; and
2. One (1) paint spray booth, identified as TF-01, consisting of one (1) spray gun with high volume low pressure (HVLP) application, with a maximum capacity of 40 axles per hour, using 0.03 gallons of black HAPs-free paint per axle, controlled by a dry filter.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
  - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
- (2) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations):
  - (a) The volatile organic compound (VOC) content of coatings delivered to the applicator at the spray booth shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for air dried coatings; and
  - (b) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent

spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Dexter Axle Company  
North Manchester, Indiana

Page 2 of 2  
169-17244-00044

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,  
Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

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cc: File - Wabash County  
Wabash County Health Department  
Air Compliance - Ryan Hillman  
Permit Tracking  
Technical Support and Modeling - Michele Boner  
Compliance Data Section - Karen Nowak

# **Indiana Department of Environmental Management Office of Air Quality**

## **Technical Support Document (TSD) for an Exemption**

### **Source Background and Description**

<b>Source Name:</b>	<b>Dexter Axle Company</b>
<b>Source Location:</b>	<b>11870 N 650 E, North Manchester, Indiana</b>
<b>County:</b>	<b>Wabash</b>
<b>SIC Code:</b>	<b>3714</b>
<b>Exemption No.:</b>	<b>169-17244-00044</b>
<b>Permit Reviewer:</b>	<b>Madhurima D. Moulik</b>

The Office of Air Quality (OAQ) has reviewed an application from Dexter Axle Company relating to the construction and operation of an axle welding and painting operation.

### **Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (a) Four (4) welding stations, identified as TFW-01, using MIG stainless steel welding wire, with maximum welding wire consumption rate of 3 pounds per hour for each station and exhausting to stack TRW-01; and
- (b) One (1) paint spray booth, identified as TF-01, consisting of one (1) spray gun with high volume low pressure (HVLP) application, with a maximum capacity of 40 axles per hour, using 0.03 gallons of black HAPs-free paint per axle, controlled by a dry filter.

### **Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

- (a) Registration No. 169-9374-00044, issued on September 1, 1998.

The source has switched to a new HAPs-free paint, and will utilize one (1) paint gun instead of two (2) guns permitted in Registration No. 169-9374-00044. This has reduced the potential to emit of pollutants to exemption levels as described below. Therefore, an Exemption will be issued.

### **Enforcement Issue**

There are no enforcement actions pending.

### **Recommendation**

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 7, 2003, with additional information received on June 11, 2003.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations for the welding operation.

Emissions from surface coating operation per gun:

Maximum no. of axles painted per hour = 40

Maximum paint usage = 0.03 gal/axle

Density of coating = 8.85 lb/gal

VOC content = 1.06 lb/gal

**VOC emission** = 0.03 gal/axle x 40 axles/hr x 1.06 lb VOC/gal x 8760 hr/yr x 1 ton/2000 lb = **5.6 tons/yr**

Solid content = 27.4% = 1.52 lb solid/gal

Transfer efficiency = 0.75

**PM = PM-10** = 0.03 gal/axle x 40 axles/hr x 1.52 lb/gal x 0.25 x 8760 hr/yr x 1 ton/2000 lb = **2.0 tons/yr**

### Potential To Emit of Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	2.07
PM-10	2.07
SO <sub>2</sub>	Negligible
VOC	5.6
CO	Negligible
NO <sub>x</sub>	Negligible

HAP's	Potential To Emit (tons/year)
Single HAP	Negligible
TOTAL	Negligible

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than the levels listed in 326 IAC 2-1.1-3(d)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.

### County Attainment Status

The source is located in Wabash County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Wabash County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (b) Wabash County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

### Part 70 Permit Determination

#### 326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326

IAC 14 and 40 CFR Part 63) applicable to this source.

### **State Rule Applicability - Entire Source**

#### **326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))**

The operation of the axle welding and painting facilities will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

#### **326 IAC 2-2 (Prevention of Significant Deterioration)**

The potential to emit of all criteria pollutants is less than 250 tons per year, and it is not one of the twenty-eight (28) listed source categories. Therefore, 326 IAC 2-2 does not apply.

#### **326 IAC 2-6 (Emission Reporting)**

This source is located in Wabash County and the potential to emit of all criteria pollutants are less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

#### **326 IAC 5-1 (Visible Emissions Limitations)**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### **State Rule Applicability - Individual Facilities**

#### **326 IAC 6-3-2 (Process Operations) and 40 CFR 52 Subpart P**

Manufacturing processes with potential PM emissions of less than 0.551 lb/hr are exempt from this rule. Therefore, 326 IAC 6-3-2 does not apply to the surface coating or welding operations at this source.

#### **326 IAC 8-2-9 (Miscellaneous Metal Coating)**

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coatings delivered to the applicator at the spray booth shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for air dried coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the source and calculations made, the spray booth is in compliance with this requirement.

## **Conclusion**

The construction and operation of this axle welding and painting facility shall be subject to the conditions of the Registration No.: 169-17244-00044.



Appendix A: Emissions Calculations  
Welding and Thermal Cutting

Page 1 of 1 TSD App A

Company Name: Dexter Axle Company  
Address City IN Zip: 11870 N 650 E, North Manchester, Indiana  
CP: 169-17244  
Plt ID: 169-00044  
Reviewer: Madhurima D. Moulik  
Date: May 20, 2003

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING												
Metal Inert Gas (MIG)(carbon steel)	1	3		0.0055	0.0005			0.017	0.002	0.000	0	0.002
EMISSION TOTALS												
Potential Emissions lbs/hr								0.02				0.00
Potential Emissions lbs/day								0.40				0.04
Potential Emissions tons/year								0.07				0.01

METHODOLOGY

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.